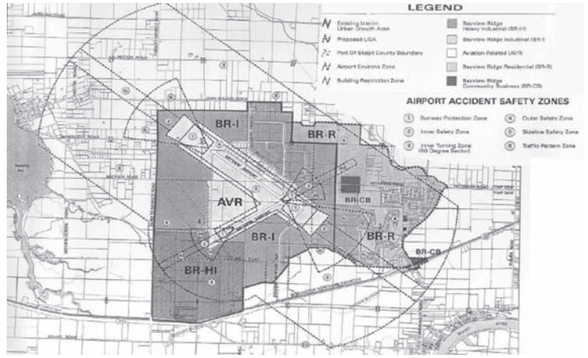
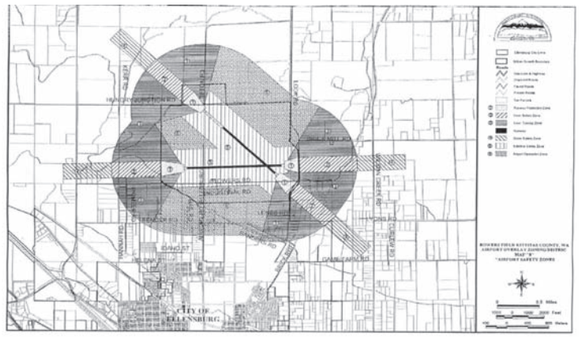
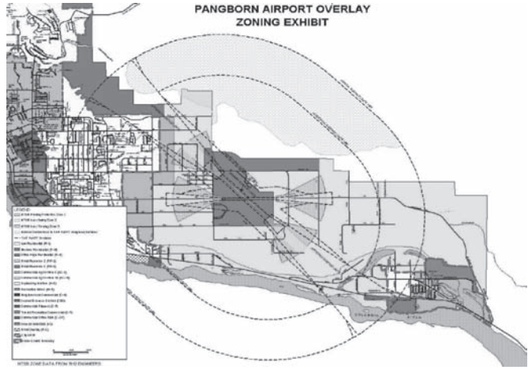
Land Use Success Stories



Skagit County Regional Airport: Strategically located, this airport is about 70 miles north of Seattle. The county, in partnership with the Port of Skagit County, developed an airport overlay using the safety zones and noise contours over the underlying zoning categories. Development regulations have also been adopted to address height hazards. A height hazard map was drafted separately and is consistent with FAR Part 77.



Bowers Field: This airport is located approximately 110 miles east of Seattle. An airport overlay ordinance was adopted in conjunction with height hazard ordinance. The ordinance also includes a disclosure notice within zones 1-6. Most of the airport influence area is designated as industrial.



Pangborn Memorial Airport: This primary commercial service airport is located about 138 miles northeast of Seattle. The county applied an airport overlay and height hazard ordinance over the underlying zoning designations. The zoning map shows both the safety areas and Part 77 together. The regulations also require a disclosure notice up to one mile from the airport and within hillside areas north of the airport already obstructing Part 77. Safety area zones 1, 2, and 3 were adopted. The remaining safety zones 4, 5 and 6 are controlled through direct zoning district classification.

What Does This Mean?

- It's possible and practical to implement a successful compatibility program.
- Proactive land use planning can significantly reduce mitigation costs and increase land use compatibility.
- Facing the challenge today will allow for a peaceful co-existence tomorrow.

For more information:

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WSDOT Aviation

Airport Land Use Compatibility Program

Airport Land Use Compatibility Program

Aviation is a critical link to the local, state and national transportation system. It provides for the efficient movement of people, goods and services across municipal, state, and international boundaries. However, one of the major challenges aviation faces today is the encroachment of incompatible land use development near and around airports. Over the last fifty years the geographic size and the nature of urban development have undergone tremendous changes, affecting the ability of our airports to meet future air transportation needs. Most airports were originally located in remote areas or areas located several miles from urban populations areas. Now, these once remote airports are experiencing growing pressure from increases in population and expansion of metropolitan areas. The result is increasing land use conflicts between airports and the surrounding community, which affects the ability of airports to operate efficiently and expand to meet growing economic demands in air transportation.

To meet this challenge, the Washington State Department of Transportation (WSDOT) Aviation has developed an Airport Land Use Compatibility Program. Through this program, WSDOT Aviation strives to safeguard the state's aviation system by protecting airports as essential public facilities and discouraging incompatible land uses.

Washington State Department of Transportation

What Does Washington State Law Say About Land Use Compatibility?

Every town, city, and county is required to adopt comprehensive plan policies and development regulations to protect public use general aviation airports, whether publicly or privately owned, from adjacent incompatible development. This is accomplished through adoption of comprehensive plan policies and development regulations. The law also requires:

- Formal consultation between airport owners, ports, pilots, aviation interests, and WSDOT Aviation prior to adoption.
- WSDOT Aviation to offer a technical assistance program consistent with state law.

Airport Encroachment…A Developing Problem

As time progresses, we are witnessing more and more the effects of incompatible development on or near public use airports. These images show the impacts of encroachment on the Anacortes Airport from 1974 – 1995. This airport is in the National Plan of Integrated Airport Systems (NPIAS) and designated as a commercial service airport. Air transportation is extremely important to this area as Anacortes Airport and Washington State Ferries are the only means of transportation to the San Juan Islands. Increased residential development near the airport has significantly heightened conflicts between the community and airport. The airport's ability to expand to meet future air transportation needs has also been significantly reduced.

1974

1986

1995

Our Land Use Program Strives to:

- Encourage partnerships and cooperative planning practices.
- Enhance understanding of aviation issues with local jurisdictions.
- Coordinate compatible land use policies and implementation regulations.

A Balanced Approach

Planning in Washington State is guided by the requirements of the Growth Management Act (GMA). GMA requires the development of comprehensive policy plans and regulations consistent with the 14 state goals. Development regulations are required to be completed within six months of the comprehensive plan's completion. GMA also requires consistency of comprehensive plans and development regulations with adjacent jurisdictions. In some cases, multiple jurisdictions are required to adopt supporting comprehensive plan policies and development regulations.

What Determines Compatibility?

Local jurisdictions and airports are encouraged to make informed decisions on land use compatibility by reviewing the best technical data available. This data includes airport characteristics, flight patterns, airport master plans, and local comprehensive plans. These elements should be reviewed together with height hazards, noise, and safety.

Height Hazards

Federal Aviation Regulation (FAR) Part 77 identifies potential aeronautical hazards in advance, thus preventing or minimizing the adverse impact to the safe and efficient use of navigable airspace around airports. Five different imaginary surfaces around airports are identified.

- *Primary* – aligned longitudinally with each runway and extends 200 feet from each runway end.
- *Approach* – longitudinally centered with the runway and extends beyond the primary surface.
- *Horizontal* – horizontal plane 150 feet above the established airport elevation with swinging arcs around the end of the primary surface.
- *Conical* – 20:1 slope surface extending beyond the horizontal surface.
- *Transitional* – constructed to join approach and horizontal or approach and transitional surfaces.

Compatibility Strategies (Height Hazards)

- Avoid obstructing airspace by encouraging limits on structure height through development regulations.
- Prohibit penetration of FAR Part 77 imaginary surfaces within their development code, unless necessary for airport operations.

Noise

This is one of the most basic airport land use compatibility concerns. Two noise thresholds are identified, which include noise 65 DLN or greater and overflight noise. The objective is to limit the number of people exposed to frequent high levels of noise. FAR Part 150 address noise levels 65 DNL and above.

Compatibility Strategies

Minimize the number of people exposed to frequent and/or high levels of noise capable of disrupting noise sensitive activities (usually 65 DNL or greater) through development regulations.

- Encourage building construction standards that limit noise intensity for residential, schools, and other noise sensitive uses.
- Require disclosure notices for new development to inform people of an airport's proximity and potential impacts.
- Prohibit residential and other noise sensitive uses adjacent to airports that can lead to annoyance and complaints.

Safety

Safety zones are representative of historical aircraft accident data collected from the National Transportation Safety Board (NTSB) from airports across the U.S. on general aviation aircraft accidents occurring within five miles of an airport. Six accident safety zones are identified that reflect the historical aircraft accident locations and frequencies. Land use intensity and density recommendations are made within each of these six safety zones to promote compatible development and to protect people on the ground. Compared to noise, safety is more difficult to address because safety addresses uncertain events that may occur with aircraft operations.

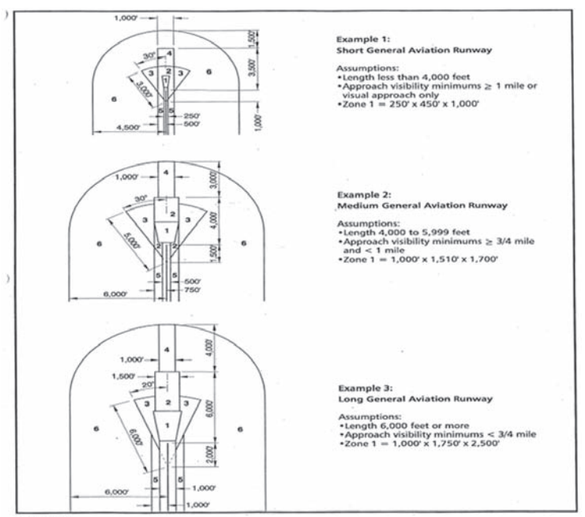

FIGURE 9K
Safety Compatibility Zone Examples
General Aviation Runways

Compatibility Strategies

- Avoid land uses that increase the severity of an accident on the ground and in the air through development regulations.
- Establish density and intensity limitations.
- Require open areas in key locations within the extended runway approach and departure areas.

Progress Report

There are 140 public use airports in Washington State. The following represents the number of jurisdictions (towns, cities and counties) that have adopted height hazard regulations, comprehensive plan policies, airports as essential public facilities, or a combination thereof. Approximately 34 airports are fully protected by their jurisdictions. By December 1, 2007, approximately 125 jurisdictions will be required by state law to be in full compliance.

- 86 Jurisdictions–Essential Public Facilities
- 68 Jurisdictions–Height Hazard Regulations
- 52 Jurisdictions–Consistent Comprehensive Plan Policies
- 40 Jurisdictions–Consistent Development Regulations
- 16 Jurisdictions–Adopted Comprehensive Plan Policies and Development Regulations in December 2004.